

80/567466

IAP20 Rec'd PCT/PTO 07 FEB 2006

Re Point V.

1. The invention relates to a method for synchronizing a radio communication system divided into radio cells for the time and frequency synchronization of a base station.

2. D1 (=US-A-6 141 332) is deemed to be the closest prior art and it discloses a method for synchronizing a radio communication system divided into radio cells,

i) in which data is transmitted by means of multiple access methods,

ii) in which every radio cell has a base station for the radio coverage of a number of mobile stations assigned to the radio cell, with

iii) the assigned mobile stations transmitting a pilot signal in an uplink to the base station.

3. The **object** of the invention is to specify a synchronization method with a low level of complexity.

4. **Solution:** The subject matter of claim 1 defines the following features, which are not contained in D1:

a) The pilot signal is determined by the base station and notified to the assigned mobile stations in a downlink

b) The base station also receives pilot signals from adjacent radio cells

c) The received pilot signals are used to determine a synchronization value for a time synchronization and/or for a frequency synchronization, to which the base station is synchronized.

5. The above-mentioned features are deemed to be inventive, as they cannot be derived in an obvious manner from the prior art.